WHAT IS CLAIMED IS:

1. A method of treatment or prophylaxis of a TH-1 deficiency-related disease or tumor in a carnivore, comprising administering to the carnivore an immunostimulant composition comprising at least one therapeutic agent selected from the group consisting of (a) feline interleukin 12, (b) polypeptides homologous to feline interleukin 12 having corresponding therapeutic effect on said disease or tumor, and nucleic acid precursors of (a) and (b).

2. The method of claim 1, wherein said at least one therapeutic agent comprises a therapeutic agent selected from the group consisting of:

   (i) nucleic acid constructs having sequences with at least 95% homology to sequences of flL12p40 (SEQ ID NO 1) and flL12p35 (SEQ ID NO 2),
   (ii) polypeptides expressed from nucleic acid constructs (i),
   (iii) polypeptides having at least 95% sequence homology to polypeptide coded by the nucleotide sequence flL12p40 (SEQ ID NO 1) and flL12p35 (SEQ ID NO 2), and
   (iv) nucleic acid constructs encoding polypeptides (iii).

3. The method of claim 2, wherein the carnivore is selected from the group consisting of Felidae.

4. The method of claim 3, wherein the Felidae carnivore is a domestic cat.

5. The method of claim 4, wherein TH-1 deficiency-related disease comprises a disease selected from the group consisting of FIV, FeLV, and FcoV.

6. The method of claim 5, wherein said at least one therapeutic agent comprises a therapeutic agent selected from the group consisting of:

   (i) nucleic acid constructs having sequences with at least 95% homology to sequences of flL12p40 (SEQ ID NO 1) and flL12p35 (SEQ ID NO 2), and

   (ii) polypeptides expressed from nucleic acid constructs (i).

7. The method of claim 6, wherein said at least one therapeutic agent comprises a polypeptide obtained by eukaryotic or prokaryotic cellular recombinant DNA expression.

8. The method of claim 7, wherein said cellular recombinant DNA expression comprises recombinantly expressing polypeptide chains of subunits p35 and p40 of feline interleukin 12 from nucleic acid encoding same, to produce said polypeptide.

9. The method of claim 8, wherein subunits p35 and p40 are in equimolar concentration with respect to one another in said immunostimulant composition.

10. The method of claim 9, wherein said cellular recombinant DNA expression includes amplification of subunit p35 of feline IL-12 with a plasmid coding for human IL-12 p35.

11. The method of claim 10, wherein said nucleic acid comprises a nucleic acid construct from the group consisting of pMol-flL12p35, pMol-flL12p40, pCl-flL-12, pCl-p40, and pCITE-p35.

12. The method of claim 11, wherein said immunostimulant composition comprises at least one antigen.

13. The method of claim 12, wherein said at least one antigen comprises gp140.

14. A method of making a therapeutic composition for treatment or prophylaxis of a disease or tumor associated with TH-1 deficiency, comprising recombinantly expressing, in eukaryotic or prokaryotic cells, polypeptide comprising polypeptide chains of subunits p35 and p40 of feline interleukin 12 from nucleic acid encoding same; extracting said polypeptide; and formulating said polypeptide in said therapeutic composition, wherein subunits p35 and p40 are in equimolar concentration with respect to one another.

15. The method of claim 14, wherein said nucleic acid is formed by steps including: amplifying the 5' region of cDNA of feline IL-12 p35 and the 3' region of cDNA of human IL-12 p35, with primers yielding 3' constructs overlapped with amplified 5' constructs; separating strands of the constructs and subjecting same to PCR reaction, to yield said nucleic acid as a PCR reaction product.

16. The method of claim 15, wherein said nucleic acid is selected from the group consisting of nucleic acids having sequences with at least 95% homology to sequences of fIL12p40 (SEQ ID NO 1) and fIL12p35 (SEQ ID NO 2).

17. The method of claim 16, wherein said sequences with at least 95% homology to sequences of fIL12p40 (SEQ ID NO 1) and fIL12p35 (SEQ ID NO 2) are controlled by a promoter and terminator sequence that is active in *Felidae*.

18. The method of claim 17, further comprising incorporating at least one antigen in said therapeutic composition.

19. The method of claim 18, wherein said antigen comprises gp140.

20. The method of claim 19, wherein said nucleic acid comprises nucleic acid construct pCI-fIL-12.